one or more user interface displays, head's up displays, monitors, or other viewing devices within the interior of the car. As such, drivers, passengers, or both can view locations outside the vehicle when turned on. These camera and display systems can reduce or eliminate the chances of reversing into other cars, trees, and other moving or stationary obstacles, in addition to reducing or eliminating the risk of running over children, people, animals, or objects, and others.

[0148] As shown in the example embodiment, one or more cameras can be removably or permanently coupled with a carrier bar or other device or apparatus at a distal end surface **3202** that points away from the body of the vehicle. They can also be mounted in locations **3208** below carrier bars. Further, they can be mounted at side locations **3204**. In some embodiments, they can be mounted at upper surface locations **3206** of the carrier bar. For upper surface locations, they may be elevated above the bar such that they are operable to view over any items that may be coupled for carrying. Some embodiments include a view proximally, toward the vehicle, so as to see the rear of the vehicle or even under the bumper. In some embodiments, they can allow for upward viewing of objects placed above them.

[0149] Those in the art will understand that cameras can have a variety of removable or permanent mounting means, which can include adhesives and glues; mechanical coupling means such as screws, nuts, bolts, washers, nails; welds; and others or can be integrated with the body of the carrier bar or other device. Imaging provided by these cameras can be high definition or at least provide an adequate amount of resolution so as to visually capture, process, and provide adequate output for display on a video monitor within the car. In some embodiments, they can have movable lenses that are controllable from within the car. In some embodiments, these movable lenses can automatically move to capture motion, based on visual detection algorithms stored in non-transitory memory.

[0150] Further, these cameras may include zoom functionality in various embodiments. In some embodiments, they can pan, swivel, rotate, tilt, or otherwise adjust a viewing angle. In some embodiments, they may be wired into the vehicle's electrical system or be removably coupled therewith. In some embodiments, they can include fish-eye lenses, flat lenses, or other types of lenses and also filters, for example, for night driving. For wireless embodiments, local or other networking capabilities should be included, as appropriate, as well as any power sources or other requirements. Radar, Lidar, and other wireless sensing technology can also be used to monitor, measure, and capture distances to objects, which may then cause displays or vehicle audio or other visual systems to alert the driver of any hazards in the direction being monitored. In some embodiments, visual data or images can be captured and stored in memory, either when an event occurs, within a specific amount of time, when activated, automatically, manually, or based on other criteria. This can be stored locally or transmitted to a remote location via a direct or indirect communicative coupling with a communications or computer network.

[0151] FIG. **33** shows a variety of example embodiments **3302**, **3304**, **3306**, **3308**, **3310** of exterior view camera's that can be coupled or integrated with carrier bars and other carrying devices and apparatuses. These can include many mechanical and electrical additional accessories, include lighting, protective housings, movement, coupling means, and others.

[0152] Additionally, it should be understood that cameras for use with carrier bars should comply with any current or later developed local or federal regulations, based on the country and locality they are to be used in. For example, in the United States, these regulations can include any regulations put out by the National Highway Traffic Safety Administration (NHTSA) or other governing or administrative body. For the NHTSA, this can include the Federal Motor Safety Vehicle Standards for Rear (or other) Visibility. One example is the FMVSS 111 standards. As such, field of view, image size, test procedures, linger time, deactivation, backing event monitoring, image response time, display luminescence, durability, phase in standards, and various other aspects of use and implementation may be required.

[0153] FIGS. **34**A-**34**D show example embodiments images **3400**, **3420**, **3440**, and **3460** of safety straps coupled with cargo carrier bars. As shown, in various embodiments, one or more straps **3402**, bands, or devices having similar properties such as free movement can be provided as a backup safety measure for transportation of items using carrier systems or bars **3406**. In general, straps **3402** can be a strip or length of fabric, rubber, plastic, or other materials and can include one or more removable or permanent buckles **3408** at or near one or both ends of strap **3402**, such that the ends can be securely fastened to each other using the buckle **3408**.

[0154] Further shown in the example embodiments one or more holes or slots **3404** through one or more walls of carrier bar **3406**. Slots **3404** can generally be sized such that it allows strap **3402** to be passed through and looped out of an interior of, or otherwise coupled with, carrier bar **3406**.

[0155] As shown in FIGS. **34**C-**34**D, when in use for carrying or transporting an item such as an adaptor bar **3410** (e.g. see FIGS. **20**-**23** and **26**A-**26**H), bicycle bar, or other item, strap **3402** can be looped at least around the bar **3410** and buckle **3408** can be secured and tightened if necessary. This can provide an additional measure of safety, by which a taut or otherwise secured strap **3402** holds bar **3410** in place and prevents it from moving back and forth. Additionally, if bar **3410** were to jostle or otherwise come free of carrier bar system **3406**, strap **3402** would still be looped around it, thus preventing adaptor bar **3410** from completely falling free and potentially injuring persons or property which may be following a vehicle equipped with carrier bar system **3406**. It should be understood that multiple loops and different orientations of strap **3402** can be provided in various embodiments, as well as additional safety features such as slits, slots, or holes through adaptor bar **3410**, different sections of carrier bar **3406**, and others.

[0156] As used herein and in the appended claims, the singular forms "a", "an", and "the" include plural referents unless the context clearly dictates otherwise.

[0157] The publications discussed herein are provided solely for their disclosure prior to the filing date of the present application. Nothing herein is to be construed as an admission that the present disclosure is not entitled to antedate such publication by virtue of prior disclosure. Further, the dates of publication provided may be different from the actual publication dates which may need to be independently confirmed.